

**VOLUNTARY AGREEMENT FOR
REMEDIAL INVESTIGATION, SOURCE CONTROL MEASURES, AND FEASIBILITY
STUDY**

DEQ NO. LQVC-NWR - LQVC-NWR-03-18

BETWEEN: Port of Portland

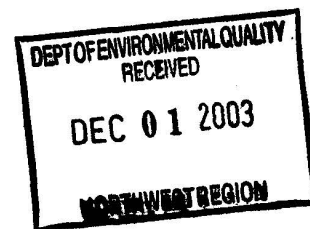
AND: Oregon Department of Environmental Quality

EFFECTIVE DATE: December 4, 2003

Pursuant to ORS 465.260(2) and (4), the Director of the Oregon Department of Environmental Quality ("DEQ"), enters this agreement ("Agreement") with the Port of Portland ("the Port"). This Agreement contains the following provisions:

	<u>Page</u>
I. RECITALS.....	1
II. AGREEMENT	5
A. Work.....	5
B. Public Participation	6
C. DEQ Access and Oversight.....	7
D. Project Managers.....	7
E. Notice and Samples.....	8
F. Quality Assurance	8
G. Records.....	8
H. Quarterly Progress Reports	9
I. Other Applicable Laws	9
J. Reimbursement of DEQ Oversight Costs	9
K. Force Majeure	10
L. Prior Approval.....	11
M. Dispute Resolution.....	11
N. Enforcement of Agreement and Reservation of Rights	11
O. Hold Harmless.....	12
P. Parties Bound	12
Q. Modification.....	13
R. Duration and Termination	13

I. RECITALS



- A. This Agreement covers a portion of the Port's Marine Terminal 4 property located at 11040 North Lombard in Portland, Oregon, 97203. Terminal 4 comprises approximately 283 acres on the east bank of the lower Willamette River directly north of the St. Johns Bridge in North Portland. The portion of Terminal 4 covered by this Agreement is referred to in this Agreement as the "Terminal 4 Slip 1 Upland Facility" or "Facility," is located at the north end of the Terminal, and consists of uplands between River Miles 4.1 and 4.3 bounded to the north by the property boundary with the Schnitzer Steel facility, ECSI No. 2355, to the east by the Terminal 4 property boundary, to the south by an undeveloped slip that is presently identified as Wheeler Bay and the boundary of the Terminal 4 Slip 3 Upland Facility, and to the west and riverside by the ordinary line of low water of the lower Willamette River at Slip 1 and Wheeler Bay. A vicinity map and a map of the Terminal 4 Slip 1 Upland Facility covered by this Agreement are included as Attachments A and B, respectively, to this Agreement and are incorporated herein. The Terminal 4 Slip 1 Upland Facility includes two Operable Units, as depicted on Attachment B. Operable Unit 1 includes the area leased to and used by Cargill, Inc., a tenant that is in the process of terminating its lease. Operable Unit 2 encompasses the rest of the Upland Facility. The Terminal 4 Slip 1 Upland Facility does not include the following facilities: the in-water sediments of Slip 1; and the City's municipal separate storm sewer system traversing the Facility and discharging at Outfall 52C.
- B. The Facility is located within or near the Portland Harbor Superfund Site. The Port and other parties have entered into an administrative consent order with the United States Environmental Protection Agency ("EPA") dated September 28, 2001, under which sediments, including the sediments of Terminal 4 Slip 1, are undergoing a remedial investigation and feasibility study ("Sediments RI/FS"). The Port has also entered into an administrative order on consent for a CERCLA removal action for T4 Removal Action Area sediments, including Slip 1 sediments, and has entered into a letter agreement with DEQ regarding the same project. To the extent appropriate and feasible, it is the parties' intent that the Work required under this agreement will be integrated or coordinated with the harbor-wide RI/FS and the removal action.
- C. According to the Port, the Port acquired the property constituting the Terminal 4 Slip 1 Upland Facility in 1971 as a result of the Port's merger with the City of Portland Commission of Public Docks ("City CPD"). The City CPD purchased the property in 1917 as part of the original 117.55 acre site for the St. Johns Terminal. Development of the terminal resulted in the filling of Gatton Slough and adjacent land and the dredging out and land excavation of Slip 1. In 1972, the Port purchased a strip of land along the northern property line from Broadway Holding Company in connection with the relocation of the grain berth to the face of current Berth 401.
- D. According to the Port, the Facility has had rail service since its creation. Originally, Oregon-Washington Railway and Navigation Company ("OWR&N") provided rail service for terminal shipments. OWR&N was succeeded by Union Pacific Railroad ("UPRR"), the current rail service provider.

- E. According to the Port, the berthing areas at Slip 1 are berths 401 and 405 (former Pier 1) and berth 408 (former Pier 2). These berthing areas are currently used for loading and unloading bulk and break-bulk cargo. Port tenant International Raw Materials ("IRM") holds preferential berthing rights at berth 408. Historically Slip 1 berths were used for bulk and break-bulk cargo loading and unloading operations handling liquid fertilizer, lead and zinc concentrates, cured meats, agricultural produce, flour, liquid bulk vegetable oils and molasses, tallow, caustic soda, and a variety of general cargoes. Storage elevators and warehouses at the Terminal 4 Slip 1 Upland Facility have been used for grain, cold storage and general cargo. The Facility's liquid bulk tanks have been dedicated to molasses and vegetable oil storage.
- F. According to the Port, the Terminal 4 Slip 1 Upland Facility and adjacent area have had numerous lessees and operators over the course of the Terminal's existence. Prior to WWII, the City operated the terminal facility. Eagle Flouring Mill and its successor, Terminal Flour Mills, built and operated a flour mill, adjacent to the Grain Elevator. In addition, the H.N. Leckenby Co. operated a United States-licensed fumigating plant.
- G. According to the Port, at the outset of World War II, the United States Army Transport Service ("ATS") selected Terminal 4 as Portland's Port of Embarkation and leased property including the Facility from the City CPD. Grain Elevator operations continued until the summer of 1942, when USATS assumed total control of all Terminal 4 functions. ATS activities included expansion of the terminal's rail network.
- H. According to the Port, upon return of control of the terminal from USATS to the City CPD in 1947, the City CPD began converting its owner-operated facilities to lessee-operated facilities. Kerr-Gifford leased the Grain Elevator and associated areas beginning in 1947. In 1951, Cargill, Inc., Kerr-Gifford's corporate parent, assumed maintenance and operation of the grain facility upon lease renewal. NW Pesticide leased the fumigation plant. Matson Navigation Co. obtained a preferential berth tenancy at Slip 1. Cargill, NW Pesticide and Matson's operations involved the use of a container crane and two gantry cranes to deposit containers and bulk products on the dock. Lead and zinc concentrates, a dominant bulk import in the fifties and early sixties, were unloaded at the Facility. Pacific Molasses Company (later PM Ag Products) leased the liquid bulk tanks facility, which lease was assumed by IRM in 1996.
- I. According to the Port, the Port's operational involvement at Terminal 4 ceased in 1988 when Oregon Terminal Co. (a subsidiary of Jones-Oregon Stevedoring) became the terminal operator. Rogers Terminal Co. ("Rogers Terminal") began providing stevedoring service for Cargill the following year.
- J. In May 2003, Cargill notified the Port that it was terminating its grain facility lease as of June 2003. Cargill is in the process of performing an environmental site assessment of the leasehold as part of its leasehold exit audit. To the extent appropriate and feasible, the Port will strive to coordinate Cargill's environmental site assessment and follow on corrective action work, if any, with the implementation of the Work under this Agreement.

- K. The Facility's stormwater is collected by a series of catch basins and is discharged to the lower Willamette River through several outfalls. Four Port outfalls (SJ15PP, SJ16PP, SJ17PP, and SJ18PP) currently discharge into Slip 1. Two Port outfalls (SJ13PP and SJ14PP) currently discharge to the Willamette River, and one Port outfall (SJ19PP) currently discharges to Wheeler Bay. These outfalls collect stormwater from areas of tenant activities including Cereal Foods, Cargill, Rogers Terminal & Shipping and IRM. This stormwater management system and associated discharges are permitted under the Port's NPDES Municipal Separate Storm Sewer Water Permit No. 101314. City of Portland Outfall 52C draining North Lombard Avenue and North Roberts Avenue stormwater basins discharges into Slip 1 near Berth 405.
- L. Potential sources of contamination at the Facility include the following: potential spills from hazardous substance storage, potential spills from bulk handling practices in connection with ship-to-shore and land-to-rail loading and unloading, and unpermitted discharges into stormwater management systems with outfalls into the lower Willamette River. Historical contamination incidents include: in approximately 1984, a liquid fertilizer spill occurred in the tank containment area currently leased by IRM. Subsequent analytical work in 1996 revealed that area soil nitrate levels were all either non-detect or below 1.0 mg/kg. In 1984, Cargill had a release of gear grease at the facility that went into Slip 1, which was responded to by Reidel Environmental. In the late 1980s, soil staining was observed at the base of an aboveground storage tank operated by Rogers Terminal for the storage of used oil, and the tank was removed in early 1990. In 1997, Rogers Terminal removed old tires and a small amount of stained soil from an area east of its shop. In 2002, the Port excavated and removed lead-contaminated soils in the railyard area of the Facility. In 2002, Cargill had a release of hydraulic oil in the vicinity of the C-11 Hydraulic Room of their leasehold.
- M. Over time, various information has been collected regarding sediment quality in Slip 1, including for actual and proposed dredging actions and as part of the DEQ/EPA Portland Harbor Study leading up to the listing of the Harbor on the National Priorities List. Results reflect elevated levels of metals (mercury, cadmium, chromium, lead, and zinc), polycyclic aromatic hydrocarbons (PAHs), dibenzofuran, DDT, and polychlorinated biphenyls (PCBs) were detected in area sediments.
- N. In response to a request from DEQ, in March 2000 the Port prepared and submitted to DEQ a Preliminary Assessment ("PA") specific to the Slip 1 upland areas of Terminal 4. Pursuant to a request by DEQ in May 2001, the Port supplemented the PA and submitted the revised version in August 2001. In January 2003, the Port supplemented its revised PA with a letter further addressing certain of DEQ's comments on the revised PA. The letter report also documented preliminary characterization of seeps observed at the head of Slip 1 during a harbor-wide seep survey conducted at the end of 2002 as part of the RI/FS for the Portland Harbor Superfund Site. In addition, on August 14, 2003, the Port submitted to DEQ a cultural resources survey of Terminal 4, dated April 11, 2003, evaluating significant cultural, archaeological and other historical resources at and in the vicinity of the Facility.

- O. Facility investigation activities conducted to date at the Terminal 4 Slip 1 Facility reveal that the initial chemicals of interest (“COIs”) are metals (mercury, cadmium, chromium, lead, and zinc), PAHs, dibenzofuran, DDT, and PCBs. These COIs are “hazardous substances” within the meaning of ORS 465.200(15). The Facility is a “facility” within the meaning of ORS 465.200(12). DEQ alleges that the presence of hazardous substances in soil and groundwater at the Facility constitutes a “release” or “threat of release” into the environment within the meaning of ORS 465.200(21). The Port is a “person” within the meaning of ORS 465.200(20).
- P. The scope of this Agreement is (1) completion of a remedial investigation and risk assessment for the Facility; (2) identification and implementation of source control measures for unpermitted discharge or migration of hazardous substances to the lower Willamette River (3) completion of a feasibility study for the Facility; and (4) DEQ's selection of a final remedial action for the Facility necessary to protect public health, safety and welfare and the environment. Final design, construction, and performance of the final remedial action will be addressed through a separate agreement with DEQ. Any sediment contamination associated with the Facility is being addressed through separate processes.
- Q. DEQ considers the activities required by this Agreement to be necessary to protect public health, safety, and welfare and the environment.

II. AGREEMENT

The parties agree as follows:

A. Work

1. Remedial Investigation, Risk Assessment, and Feasibility Study

The Port shall perform a Remedial Investigation, Risk Assessment, and Feasibility Study for the Terminal 4 Slip 1 Upland Facility, in accordance with OAR 340-122-0080, 340-122-0084 and 340-122-0085, applicable elements of the Scope of Work (“SOW”) included and incorporated by reference as Attachment B to this Agreement, and the terms and schedule of a DEQ-approved work plan to be developed by the Port. The Port may specify, in the proposed work plan, elements of the SOW that the Port considers inapplicable or unnecessary to the Facility Remedial Investigation, Risk Assessment, or Feasibility Study. The Port may propose to perform the work in phases or operable units.

2. Source Control Measures

For any unpermitted discharge or migration of hazardous substances to the lower Willamette River or to its sediments identified in the Remedial Investigation, the Port shall identify and evaluate source control measures in accordance with the SOW and the terms and schedule of a DEQ-approved work plan to be developed by the Port. DEQ will review and approve source control measures pursuant to OAR 340-122-0070 and through

consultation with EPA. Upon DEQ approval, the Port shall implement source control measures in accordance with a DEQ-approved work plan to be developed by the Port.

3. DEQ Review

DEQ shall provide review, written comments, approvals, disapprovals, and oversight in accordance with the schedule set forth in the SOW, or as soon as thereafter practicable in the event staff resources or workload prevent compliance with the schedule. Any DEQ delay shall correspondingly extend the Port's schedule for a related deliverable or activity.

4. DEQ Record of Decision

Following the Port's completion of the Feasibility Study, and taking into consideration the source control measures already implemented by the Port, DEQ will select or approve a final remedial action for the Facility in accordance with OAR 340-122-0090 and after consultation with EPA, through an administrative Record of Decision.

5. Additional Measures

The Port may elect at any time during the term of this Agreement to undertake remedial measures, other than those required under this Agreement, that are necessary to address a release or threatened release of hazardous substances at the Facility. Such other measures shall be subject to prior approval by DEQ. Prior approval shall not be required in emergencies where the Port reasonably believes a delay in undertaking a particular action will threaten human health, safety, or the environment, provided that the Port notifies DEQ of the emergency and action as soon as is practicable.

6. Dredging Activities

The Port shall notify the DEQ Project Manager at least 60 days before undertaking any slip maintenance or improvement dredging that might disturb sediments adjacent to the T4 Slip 1 Upland Facility. Within 15 days of the Port's submission of any pre- or post dredging characterization report for such sediments to any governmental agency, the Port shall submit a copy of the same report to the DEQ Project Manager.

B. Public Participation

1. Upon execution of this Agreement, DEQ will provide public notice of this Agreement through issuance of a press release, at a minimum to a local newspaper of general circulation, describing the measures required under this Agreement. Copies of the Agreement will be made available to the public. Before publication, DEQ shall provide the Port with a draft of the press release, and consider any comments by the Port.
2. Before the selection or approval of a source control measure or final remedial action for the Facility, DEQ will provide public notice and opportunity for comment in accordance with OAR 340-122-0100.

3. DEQ will work with the Port to accommodate any further public participation associated with this Agreement that is required by the Port's compliance with the CERCLA NCP.

C. DEQ Access and Oversight

1. DEQ shall use its best efforts, but not be obligated, to provide reasonable notice before entering the Terminal 4 Slip 1 Upland Facility. Consistent with the terms of the Port's leases with its tenants, as identified to DEQ in an approved Remedial Investigation work plan, the Port shall allow DEQ to enter all portions of the Facility at all reasonable times for the purposes, among other things, of inspecting records relating to work under this Agreement; observing the Port's progress in implementing this Agreement; conducting such tests and taking such samples as DEQ deems necessary; verifying data submitted to DEQ by the Port; and using camera, sound recording, or other recording equipment for purposes relating to work under this Agreement. Upon the Port's verbal request, DEQ shall make available to the Port a split or duplicate of any sample or recording taken by DEQ pursuant to this Agreement. DEQ shall adhere to all Facility health and safety requirements identified in the applicable Health and Safety Plan, which might include requirements to wear personal protective equipment and be accompanied by Facility personnel.
2. The Port shall permit DEQ to inspect and copy all records, files, photographs, documents, and data in connection with work under this Agreement, except that the Port shall not be required to permit DEQ to inspect or copy items subject to attorney-client or attorney work product privilege. DEQ shall use its best efforts, but not be obligated, to provide reasonable notice before asking to inspect and copy records.
3. Attorney-client and work product privileges may not be asserted with respect to any records required to be submitted to DEQ under Paragraphs II.G.1 and II.G.2 of this Agreement. Upon DEQ's request, the Port shall identify to DEQ -- by addressor-addressee, date, general subject matter, and distribution -- any document, record, or item withheld from DEQ on the basis of attorney-client or attorney work product privilege. DEQ reserves its rights under law to obtain documents that DEQ asserts are improperly withheld by the Port.

D. Project Managers

1. To the extent possible, all reports, notices, and other communications required under or relating to this Agreement shall be directed to the following individuals:

DEQ Project Manager:

Tom Gainer
Voluntary Cleanup Program
Oregon DEQ
2020 SW Fourth Avenue, Suite 400
Portland, Oregon 97201-4987

The Port Project Manager:

Anne Summers
Project Manager
Port of Portland
P.O. Box 3529
Portland, Oregon 97208

gainer.tom@deq.state.or.us
fax: 503-229-6899

summea@portptld.com
fax: 503-944-7353

2. The Port's and DEQ's Project Managers shall be available and have the authority to make day-to-day decisions necessary to complete the SOW under this Agreement.

E. Notice and Samples

The Port shall make every reasonable attempt to notify DEQ of any excavation, drilling, or sampling to be conducted under this Agreement at least five working days before such activity but in no event less than 24 hours before such activity. Upon DEQ's verbal request, the Port shall make available to DEQ a split or duplicate of any sample taken pursuant to this Agreement. DEQ shall make every effort to complete analysis of any split or duplicate sample on a schedule consistent with the Port's schedule for related activities. DEQ shall provide the Port with copies of all analytical data from such samples as soon as practicable.

F. Quality Assurance

The Port shall conduct all sampling, sample transport, and sample analysis in accordance with the Quality Assurance/ Quality Control ("QA/QC") provisions approved by DEQ as part of a work plan developed by the Port and approved by DEQ. Plans prepared and work conducted as part of this Agreement shall be consistent with DEQ's *Quality Assurance Policy No. 760.00*. The Port shall ensure that each laboratory used by the Port for analysis performs such analyses in accordance with such provisions.

G. Records

1. In addition to those technical reports and documents specifically required under this Agreement, the Port shall provide to DEQ within 30 days of DEQ's written request copies of documents generated in connection with the work required under this Agreement, including QA/QC memoranda and QA/QC audits, draft and final deliverable plans, final reports, task memoranda, field notes, and laboratory analytical data that have undergone data quality validation.
2. If DEQ determines that review of raw data or preliminary laboratory reports is necessary in order to ensure protection of public health, safety, and welfare or the environment, that information will be provided by the Port within 10 days of DEQ's written request.
3. The Port and DEQ shall preserve all records and documents in their possession or control, or in the possession or control of their employees, agents, or contractors, that relate in any way to activities under this Agreement, for at least five years after termination of this Agreement under Subsection II.R., provided that after such 5-year period, the Port and DEQ shall each provide the other 60 days notice before destroying or otherwise disposing of such records, and make them available for inspection and copying.
4. The Port may assert a claim of confidentiality regarding any documents or records submitted to or copied by DEQ pursuant to this Agreement. DEQ shall treat documents

and records for which a claim of confidentiality has been made in accordance with ORS 192.410 through 192.505. If the Port does not make a claim of confidentiality at the time the documents or records are submitted to or copied by DEQ, the documents or records may be made available to the public without notice to the Port.

H. Quarterly Progress Reports

The Port shall deliver to DEQ on or before the fifteenth day of the month following each calendar quarter of this Agreement a progress report containing the following items. DEQ anticipates that progress reports will not exceed two pages in length. A report may be provided by email, except as noted.

1. Actions taken under this Agreement during the previous quarter;
2. Sampling, test results, and any other data generated by the Port during the previous quarter (hard copies of analytical data should be provided by mail);
3. A description of any problems experienced during the previous quarter and the actions taken to resolve them; and
4. Actions scheduled to be taken in the next quarter.

I. Other Applicable Laws

Subject to ORS 465.315(3), all activities undertaken by the Port under this Agreement shall be performed in accordance with all applicable federal, state, and local laws and regulations. Further, all activities under this Agreement shall be performed in accordance with any applicable federal, state, and local laws and regulations related to archeological objects and sites and protection thereof. If archeological objects or human remains are discovered during investigation, removal or remedial activities at the Facility, the Port shall, at a minimum, (a) stop work immediately in the vicinity of the find, (b) provide any notifications required by ORS 97.745 and 358.920, (c) notify, within 24 hours of the discovery, Fenix Grange, Portland Harbor Project Coordinator, at 503-229-6590, and (d) use best efforts to ensure that the Port and its employees, contractors, counsel, and consultants keep the discovery confidential, including but not limited to refraining from contacting the media or any third party or otherwise sharing information regarding the discovery with any member of the public, and immediately notifying DEQ of and directing any inquiry from the media or public regarding the discovery to DEQ.

J. Reimbursement of DEQ Oversight Costs

1. Prior to entry of this Agreement, DEQ shall submit to the Port an estimate of unreimbursed costs incurred by DEQ to date for Facility RI/FS-related activities and for preparation and negotiation of this Agreement. Upon entry of this Agreement, DEQ shall submit to the Port an estimate of future DEQ oversight costs associated with implementation of this Agreement over the next one year. Thereafter, on the anniversary of the entry of this Agreement, DEQ shall provide an estimate of future DEQ oversight costs associated with implementation of this Agreement over the ensuing one year period.
2. DEQ shall submit to the Port a monthly invoice of costs incurred after issuance of this Agreement by DEQ in connection with oversight and implementation of this Agreement. DEQ also will submit to the Port an invoice for unreimbursed costs incurred before entry of this Agreement. Each invoice will include a summary of costs billed to date. DEQ's invoice for direct costs will include a direct labor summary showing the persons charging time, their billing rates for that month, the amount of time, and the nature of the work performed.
3. DEQ or State of Oregon oversight costs payable by the Port shall include both direct and indirect costs. Direct costs shall include Facility-specific expenses, DEQ contractor costs, and DEQ legal costs. Indirect costs shall include those general management and support costs of DEQ and of the Land Quality Division that are allocable to DEQ oversight of this Agreement and not charged as direct, Facility-specific costs. Indirect costs shall be based on a percentage of direct personal services costs.
4. Within 30 days of receiving a DEQ invoice, the Port shall pay the costs billed by check made payable to the "State of Oregon, Hazardous Substance Remedial Action Fund." The Port shall pay simple interest of 9% per annum on the unpaid balance of any oversight costs, which interest shall begin to accrue at the end of the 30-day payment period. Upon request to DEQ, the Port may review underlying documentation including but not limited to the following: DEQ personnel time sheets; travel authorizations and vouchers; DEQ contractor monthly invoices; and all applicable laboratory invoices.

K. Force Majeure

1. If any event occurs that is beyond the Port's reasonable control and that causes or might cause a delay or deviation in performance of the requirements of this Agreement, the Port shall promptly notify DEQ's Project Manager verbally of the cause of the delay or deviation and its anticipated duration, the measures that have been or will be taken to prevent or minimize the delay or deviation, and the timetable by which the Port proposes to carry out such measures. The Port shall confirm this information in writing within five working days of the verbal notification.
2. If the Port demonstrates to DEQ's satisfaction that the delay or deviation has been or will be caused by circumstances beyond the reasonable control and despite the due diligence of the Port, DEQ shall extend the times for performance of related activities under this Agreement, as appropriate. Circumstances or events beyond the Port's control might include but are not limited to acts of God, unforeseen strikes or work stoppages, fire,

explosion, riot, sabotage, or war. Increased cost of performance or changed business or economic circumstances shall be presumed not to be circumstances beyond the Port's reasonable control.

L. Prior Approval

Where DEQ review and approval is required for any plan or activity under this Agreement, the Port shall not proceed to implement the plan or activity until DEQ approval is received. Any DEQ delay in granting or denying approval shall correspondingly extend the time for completion by the Port. Prior approval shall not be required in emergencies where the Port reasonably believes a delay in undertaking a particular action will threaten human health or safety, or the environment, provided that the Port notifies DEQ of the emergency and action as soon as is practicable.

M. Dispute Resolution

In the event of disagreement between the Port and DEQ regarding implementation of this Agreement, the Port and DEQ shall, in the following order: (1) make a good faith effort to resolve the dispute between Project Managers; (2) if necessary, refer the dispute for resolution by the immediate supervisors of the Project Managers; (3) if necessary, provide each other their respective positions in writing and refer the dispute for resolution by DEQ's Administrator of the Land Quality Division or the Northwest Region Administrator and the Port's Director of Environmental Affairs; and (4) if necessary, refer the dispute for resolution by DEQ's Director and the Port's Executive Director. DEQ's final decision after such dialogue shall be enforceable under this Agreement. The time required for dispute resolution shall correspondingly extend the Port's schedule of all pending, affected deliverables and activities.

N. Enforcement of Agreement and Reservation of Rights

1. In the event of the Port's failure to comply with this Agreement (including any failure to reimburse oversight costs), DEQ may enforce this Agreement as an order under ORS 465.260(5) or may terminate this Agreement after 30 days' written notice to the Port.
2. In the event of DEQ's failure to provide oversight in accordance with this Agreement, the Port may terminate this Agreement after 30 days' written notice to DEQ. Costs incurred or obligated by DEQ before the effective date of any termination of this Agreement shall be owed under the Agreement notwithstanding such termination.
3. The Port does not admit any facts (including those recited herein, except those stated in paragraphs I.C, I.D, I.E, I.F, I.G, I.H, and I.I.), legal issues, liability, or violation of law by virtue of entering this Agreement.
4. Except as otherwise provided in Subsection II.O., nothing in this Agreement shall prevent the Port from exercising any rights of contribution or indemnification that the Port might have against any person, including the State of Oregon, regarding the release(s) of hazardous substances that are the subject of this Agreement, provided the Port waives any

right it might have under ORS 465.260(7) to seek reimbursement from the Hazardous Substance Remedial Action Fund for costs incurred under this Agreement.

5. The Port agrees not to litigate, in any proceeding brought by DEQ to enforce this Agreement, any issue other than the Port's or DEQ's compliance with this Agreement.
6. Because the Terminal 4 Slip 1 Upland Facility is part of the initial study area of the Portland Harbor Superfund Site, DEQ agrees to cooperate with the Port to encourage EPA to accept satisfactory and complete performance under this Agreement as fulfillment of the Port's obligation to perform the same work under CERCLA. If EPA does not agree that such performance under this Agreement fulfills such CERCLA obligations, this Agreement may be modified pursuant to Subsection II.Q. or terminated at the election of DEQ or the Port. Any other additional EPA-imposed obligations may be addressed by modification of this Agreement under Subsection II.Q. or by separate agreement or order, including an enforceable agreement with EPA. DEQ and the Port will coordinate to ensure that all work under this Agreement is integrated and coordinated, to the extent possible, with any similar work to be undertaken pursuant to agreements and orders entered into by the Port and EPA.
7. This Agreement supersedes any prior agreement between DEQ and the Port regarding the Facility, including Intergovernmental Agreement DEQ No. WMCVC-NWR-98-06 dated October 23, 1998, but does not supersede the letter agreement between the Port and DEQ regarding the T4 CERCLA removal action.

O. Hold Harmless

1. To the extent permitted by the Oregon Constitution and by the Oregon Tort Claims Act, the Port shall save and hold harmless DEQ and its officers, employees, contractors, and agents, and indemnify the foregoing, from and against any and all claims arising from acts or omissions related to the implementation of this Agreement of the Port or its officers, employees, contractors, agents, receivers, trustees, or assigns. DEQ shall not be considered a party to any contract made by the Port or its agents in carrying out activities under this Agreement.
2. To the extent permitted by Article XI Section 7 of the Oregon Constitution and by the Oregon Tort Claims Act, DEQ shall save and hold harmless the Port and its officers, employees, contractors, and agents, and indemnify the foregoing, from and against any and all claims arising from acts or omissions related to this Agreement of DEQ or its officers, employees, contractors, or agents -- except for acts approving or omissions constituting approval of any activity of the Port under this Agreement. The Port shall not be considered a party to any contract made by DEQ or its agents in carrying out activities under this Agreement.

P. Parties Bound

This Agreement shall be binding on the parties and their respective successors, agents, and assigns. The undersigned representative of each party certifies that he or she is fully

authorized to execute and bind such party to this Agreement. No change in ownership or corporate or partnership status relating to the Facility shall in any way alter the Port's obligations under this Agreement, unless otherwise approved in writing by DEQ.

Q. Modification

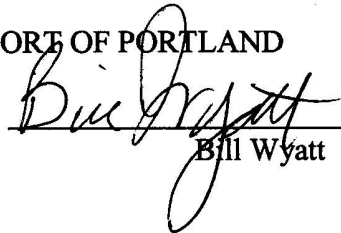
DEQ and the Port may modify this Agreement by mutual written agreement.

R. Duration and Termination

Upon completion of work under this Agreement, the Port shall submit to DEQ a written notice of completion. This Agreement shall be deemed satisfied and terminated upon payment of all oversight costs owed, DEQ's issuance of a letter acknowledging satisfactory completion of activities in accordance with this Agreement, and DEQ's issuance of a Record of Decision selecting or approving a final remedial action for the Facility. Such letter shall be issued within 60 days of issuance of the Record of Decision and payment of outstanding DEQ oversight costs, or as soon thereafter as is reasonably practicable. In the event that DEQ is unable to issue such letter within 60 days of issuance of the Record of Decision, DEQ shall provide the Port with a written schedule upon which DEQ anticipates issuance of the letter.

THE PORT OF PORTLAND

By: _____

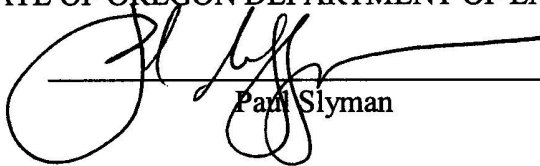

Bill Wyatt

Executive Director

Date: 11-26-2003

STATE OF OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

By: _____


Paul Slyman

NW Administrator

Date: 12/4/03

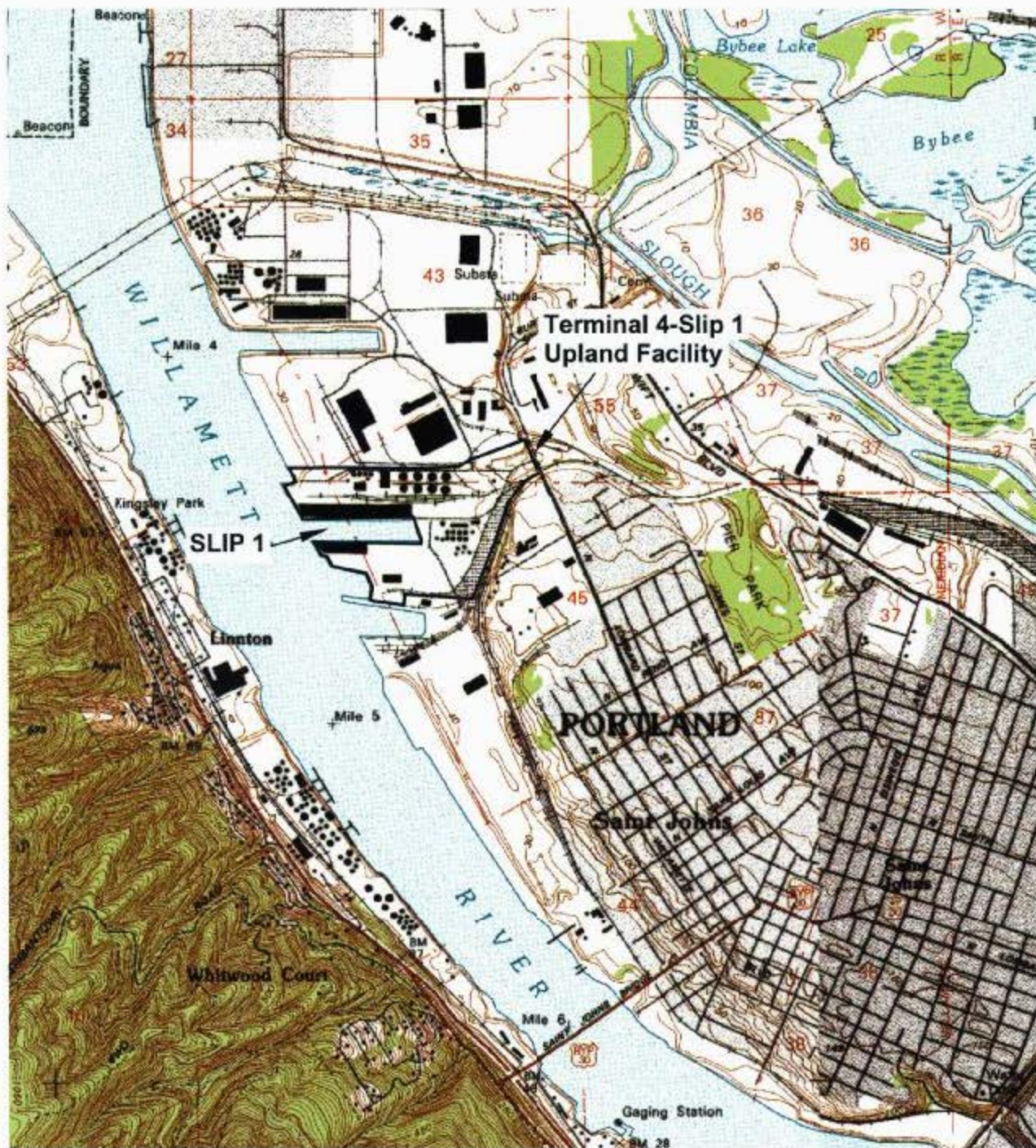
**APPROVED AS TO LEGAL SUFFICIENCY
FOR THE PORT**

By: _____

Counsel for the Port of Portland

ATTACHMENT A

(a vicinity map and map of the Facility covered by this Agreement)



SOURCE: PORTLAND, OREGON USGS 7.5 MINUTE QUADRANGLE, 1990
 LINNTON, OREGON USGS 7.5 MINUTE QUADRANGLE, 1990.

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 APPROX. SCALE IN FEET

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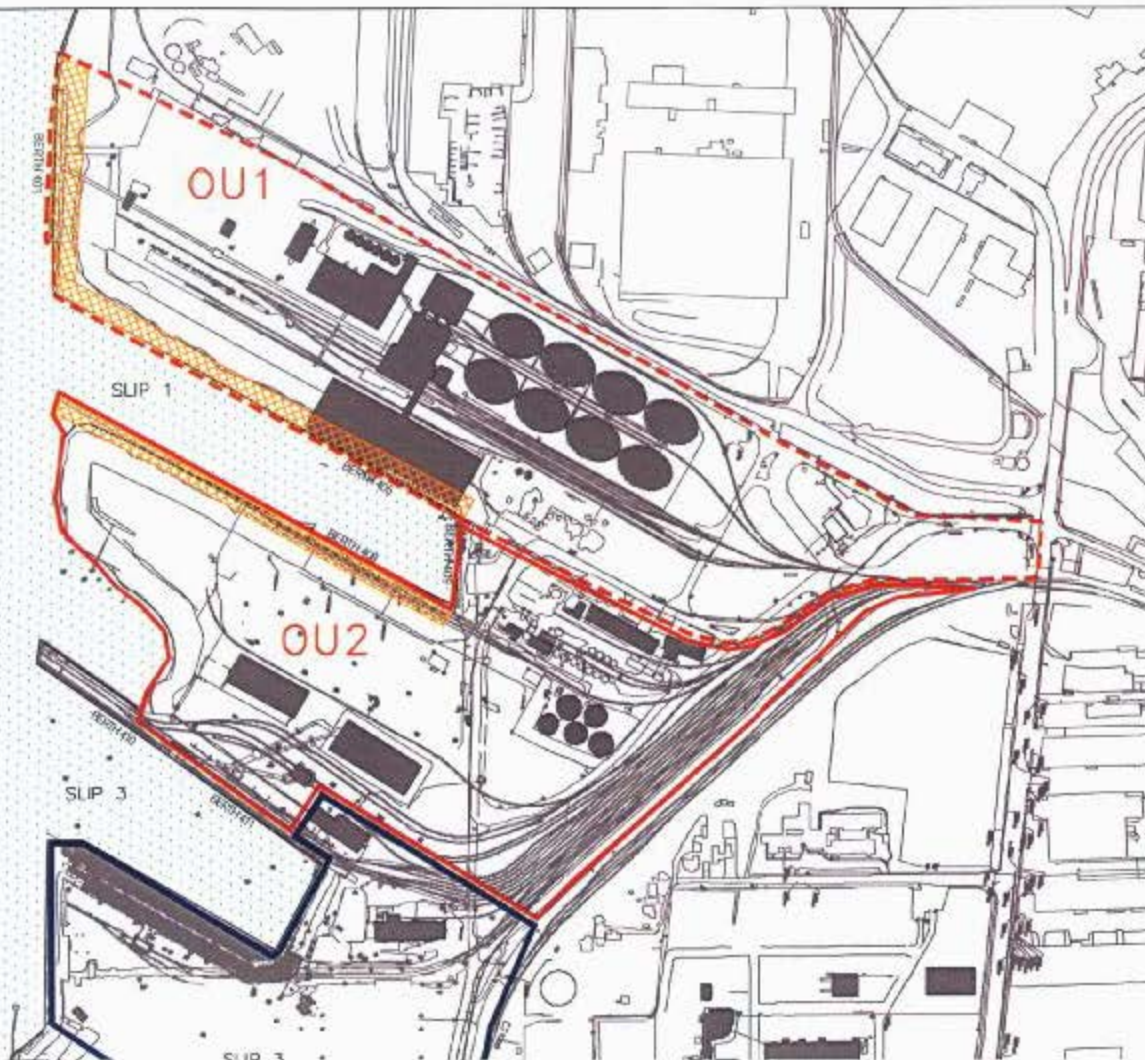
VICINITY PLAN

PORT OF PORTLAND
 TERMINAL 4 SLIP 1 UPLAND FACILITY
 11040 NORTH LOMBARD
 PORTLAND, OREGON

ATTACHMENT-A

AUGUST 2003
 25695429.25000

WILLAMETTE RIVER

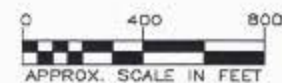


LEGEND

- T4 SLIP 1 OPERABLE UNIT 1 BOUNDARY
- T4 SLIP 1 OPERABLE UNIT 2 BOUNDARY
- T4 SLIP 3 UPLAND FACILITY BOUNDARY
- EXISTING STRUCTURES
- DOCK OR RIVER AREAS*
- WILLAMETTE RIVER

NOTES:

* DOCK AREAS ARE INCLUDED IN THIS AGREEMENT, BUT ANY SEDIMENT OR RIVER AREAS ARE EXCLUDED FROM THE AGREEMENT.



URS

OCTOBER 2003
23085423

FACILITY PLAN
PORT OF PORTLAND
TERMINAL 4 SLIP 1 UPLAND FACILITY
11040 NORTH LOMBARD
PORTLAND, OREGON
ATTACHMENT-B

**ATTACHMENT C
SCOPE OF WORK FOR
REMEDIAL INVESTIGATION, SOURCE CONTROL MEASURES, AND FEASIBILITY
STUDY**

I. SCHEDULE

The Port will submit for DEQ review and approval, in accordance with the following schedule, work plans and/or reports for a Facility Remedial Investigation (“RI”), Risk Assessment (“RA”) and Feasibility Study (“FS”) and for Facility Source Control Measures (“SCMs”). The work plans and reports shall address all elements of this Scope of Work (“SOW”). Elements of the SOW may be addressed by alternative means or by using existing data or information to the extent that the data are applicable, meet the objectives of the RI, RA, FS or SCMs, and are of acceptable QA/QC.

ACTIVITY	SCHEDULE
Submit Draft RI Proposal to DEQ	To DEQ within 45 days of the issuance of this Agreement
DEQ Review and Comment	To Respondent within 30 days of receipt of the Draft RI Proposal
Submit Draft RI/FS Work Plan to DEQ	To DEQ within 60 days of DEQ approval of the RI Proposal
DEQ Review and Comment	To Respondent within 30 days of receipt of the Draft RI/FS Work Plan
Final RI/FS Work Plan	To DEQ within 30 days of receipt of DEQ comments on the Draft RI/FS Work Plan
Initiation of RI	To be specified in the Project Management section of the RI Work Plan
Initiation of SCM	To be specified in the Project Management section of the RI Work Plan

The schedule for additional deliverables specified in this SOW (e.g., Risk Assessment Work Plan, Remedial Investigation Report, Risk Assessment Report, Source Control Measures Work Plan, and Feasibility Study Report) shall be specified in the Project Management section of the RI/FS Work Plan.

The Port may amend all work plans as necessary to reflect or incorporate newly discovered information and/or environmental conditions. Additional work plans and work plan amendments are subject to DEQ review and approval and will be processed according to schedules negotiated between the parties at the time of each phase change or task addition. The Port will initiate and complete work according to the schedule specified in the applicable approved work plan or amendment. Future schedules or deadlines for submittals, work plans or other requirements shall be adjusted accordingly for the time necessary for preparation, approval and implementation of additional work plans, investigations and/or reports not contemplated in the original schedule and shall be approved by DEQ in writing.

II. OBJECTIVES

Work performed under this SOW will incorporate and complement existing Facility information by achieving the following specific objectives. For purposes of this SOW, "Facility" shall consist of the portion of Terminal 4 Slip 1 identified in Paragraph I.A of the Agreement's Recitals as the Terminal 4 Slip 1 Upland Facility.

- A. Identify and characterize all hazardous substance source areas at the Facility. Source areas shall be characterized through a review of historical information and the collection of environmental samples for chemical, geotechnical, and other analyses. The evaluation of source areas shall focus on upland operations that may have resulted in a hazardous substance release.
- B. Evaluate all contaminant migration pathways at the Facility. Key elements relevant to contaminant migration include, but are not limited to, the rate and direction of groundwater flow, subsurface contaminant migration to the Willamette River, overland contaminant migration to the Willamette River, storm water discharge to the Willamette River, direct and indirect release to the Willamette River, preferential migration pathways, volatilization, dust entrainment, and riverbank seepage.
- C. Determine the nature, extent, and distribution of hazardous substances in affected media at the Facility. This analysis should focus on the vertical and horizontal extent of source area contamination, groundwater contamination, and surface and subsurface soil contamination.
- D. Collect sufficient data and historical information to allow the identification of possible areas of sediment contamination adjacent to the Facility. Areas of potential sediment contamination shall be characterized through the Portland Harbor Sediment RI/FS. Data collection and evaluation shall consider the potential for contaminant migration to the Willamette River and for over- or in-water releases of hazardous substances resulting from Facility operations. The Port may be required to perform limited sediment or benthic sampling adjacent to the Facility in order to address an objective of this SOW but will not be required to conduct sediment or benthic sampling that is duplicative of sampling under the Portland Harbor Sediment RI/FS.
- E. Identify hot spots of contamination, if any, at the Facility.
- F. Identify all current and reasonably likely future human and ecological receptors at the Facility. Receptors shall include human and ecological receptors that may be exposed to hazardous substances at the Facility. This analysis should consider all relevant contaminant migration pathways and the nature, extent and distribution of hazardous substances in affected media.
- G. Through the performance of human health and ecological RAs, evaluate the risk to human health and the environment from releases of hazardous substances at or from the Facility.
- H. Generate or use data of sufficient quality for the analysis and selection of remedial alternatives.

- I. Develop and evaluate a range of remedial alternatives that will address Facility risks identified in the RI and that will prevent adverse effects to beneficial water uses as determined through an exceedance of applicable standards, criteria or guidance.
- J. Include a preference for treatment of identified hot spots of contamination.
- K. Develop the information necessary to identify and design SCMs to address unpermitted discharges or migrations of hazardous substances to the lower Willamette River or its sediments that arose or arise from Facility operations.
- L. Implement the SCMs selected by DEQ.

III. REMEDIAL INVESTIGATION PROPOSAL

The RI Proposal shall briefly discuss the Port's proposed approach to the RI, addressing soil, groundwater, surface water, sediments, and air. The proposal will provide the framework for the RI Work Plan and will include at a minimum, a summary of data collected to date, a conceptual site model (including a conceptual site hydrogeologic model), a description of RI goals and objectives and an estimated schedule for completion of the RI.

IV. REMEDIAL INVESTIGATION AND FEASIBILITY STUDY WORK PLAN

The RI/FS Work Plan shall be developed in accordance with applicable Oregon Administrative Rules (OAR §§ 340-122-010 through 340-122-115), DEQ guidance, and the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, OSWER Directive 9355.3-01, 1988, as appropriate. Existing data may be used if it meets data quality objectives for the RI/FS Work Plan. The RI/FS Work Plan shall include, but not be limited to, the following items:

A. Project Management Plan

The RI/FS Work Plan shall include (1) a proposed schedule for submittals and implementation of all proposed activities and phases pertaining to this SOW (the schedule will include target dates for the submittal of an RA work plan, and of draft and final RI, RA, SCMs and FS reports); (2) a description of the personnel (including subcontractors, if known) involved in the project, and their respective roles in the project; and (3) a discussion of how variations from the approved work plan will be managed.

B. Facility Description

The RI/FS Work Plan shall include a discussion of the current understanding of the physical setting of the Facility and surrounding area; the Facility history; hazardous substance and waste management history; Facility operations conducted on, in, over or adjacent to the Willamette River and current Facility conditions.

C. Facility Characterization Plan

The Facility Characterization plan shall be consistent with DEQ guidance and the requirements specified in OAR § 340-122-080. The Facility Characterization plan shall include, but not be limited to, characterization of the hazardous substances, characterization of the Facility, identification of potential receptors and the collection and evaluation of information relevant to the identification of hot spots of contamination, and shall address the following items:

1. Soils

Objective: to identify and characterize releases of hazardous substances to the Facility soils.

Scope: the plan shall supplement previous Facility soil sampling. The plan shall address all areas of the Facility which could potentially have received spills, leaks from tanks or piping, been used for waste treatment or disposal, or been affected by contaminated surface water or storm water runoff, and at which soil contamination is known or suspected.

Procedures: the plan shall be designed and conducted to characterize the Facility geology, determine the physical and chemical soil characteristics relevant to the RI and FS; evaluate the potential for contaminant migration; gather the information necessary to identify contaminant hot spots; determine the vertical and lateral extent of soil contamination, and determine the extent to which soil contamination may contribute to Willamette River sediment contamination. The plan shall include the proposed methodology for characterizing soil.

2. Groundwater

Objective: to identify and characterize releases of hazardous substances to the Facility groundwater.

Scope: the plan shall supplement previous Facility investigations and shall identify and characterize all past, current and potential releases of hazardous substances to groundwater from the Facility.

Procedures: the plan shall be designed and conducted to characterize the Facility hydrogeology, determine the physical and chemical water bearing zone characteristics relevant to the RI and FS; evaluate the potential for contaminant migration through groundwater; gather the information necessary to identify contaminant hot spots; determine the vertical and lateral extent of groundwater contamination on and, if applicable, off-site; estimate the rate of contaminant flux to the Willamette River; and determine the extent to which free phase product is migrating to the Willamette River. The plan shall include the proposed methodology for characterizing groundwater. Alternative methods for characterizing groundwater should be considered to accelerate the RI and FS. Monitoring wells and other holes must be drilled, constructed and decommissioned in accordance with OAR Chapter 690, Division 240 and DEQ's Ground Water Monitoring Well, Drilling, Construction and Decommissioning guidelines (DEQ 1992).

3. Surface Water

Objective: to identify and characterize releases of hazardous substances from the Facility to surface water.

Scope: the plan shall supplement previous Facility investigations and shall identify and characterize all past, current, and potential impacts to surface waters from the Facility.

Procedures: the plan shall be designed and conducted to characterize the Facility hydrology; determine the physical and chemical surface water characteristics relevant to the RI and FS including flow characteristics; evaluate the potential for contaminant migration; gather the information necessary to identify contaminant hot spots; determine the extent to which surface water may have been affected by releases of hazardous substances at the Facility; and determine the nature and extent of surface water contamination, including whether such contamination extends to the lower Willamette River. The plan shall include the proposed methodology for characterizing surface water.

4. Sediments

Objective: to identify and characterize releases of hazardous substances from the Facility to sediments.

Scope: the plan shall supplement previous Facility investigations. The plan shall identify and characterize all past, current, and potential releases from the Facility of hazardous substances to sediments, in a manner consistent with the Portland Harbor Sediment RI/FS. Characterization of the nature and extent of sediment contamination shall not be subject to this Agreement, but is contemplated to be completed through the Portland Harbor Sediment RI/FS.

Procedures: the plan shall be designed to identify Facility sources of sediment contamination and to characterize mechanisms for release from the Facility to sediments.

5. Air

Objective: to identify and characterize any unpermitted release of hazardous substances to the air, from Facility soil, surface water, or groundwater contamination.

Scope: the plan shall supplement previous Facility investigations and shall identify and characterize all past, current and potential releases (e.g., contaminated soil or groundwater) of hazardous substances to air.

Procedures: the plan shall characterize the Facility climatology; determine the physical and chemical air characteristics relevant to the RI and FS; be designed to delineate the nature and extent of contamination; evaluate the potential for contaminant migration to the Willamette River and surrounding areas; and gather the information necessary to identify contaminant hot spots. The plan shall include the proposed methodology for evaluating air emissions using appropriate emission calculations and/or a field sampling program.

6. Identification of Current and Reasonably Likely Future Land and Water Use

Objective: to identify current and reasonably likely future land and water uses in the Facility locality, excluding those of the Willamette River.

Scope: the plan shall be designed to identify current and reasonably likely future land and water uses for the purposes of identifying contaminant hot spots and conducting the baseline human health and ecological RAs based on OAR § 340-122-080, and DEQ Guidance.

Procedures: the plan shall include the proposed methodology for identifying current and reasonably likely future land and water uses in the Facility locality.

D. Sampling and Analysis Plan (SAP)

Objective: to adequately document all sampling and analysis procedures.

Scope: the following guidance documents shall be used to prepare the SAP: Data Quality Objectives for Remedial Response Activities, EPA/540/G-87/004 (OSWER Directive 9355.0-7B), March 1987; Test Methods for Evaluating Solid Waste, SW-846; and A Compendium of Superfund Field Operations Methods, EPA/540/P-87/001 (OSWER Directive 9355.0-14), December 1987. The SAP shall address all topics listed in Environmental Cleanup Division Policy #760.000, Quality Assurance Policy.

Procedures: the work plan shall include a sampling and analysis plan (SAP). The SAP shall include quality assurance and quality control (QA/QC) procedures for both field and lab work. The SAP shall be sufficiently detailed to function as a manual for field staff.

E. Health and Safety Plan (HASP)

Objective: to establish policies and procedures to protect workers and the public from the potential hazards posed by a hazardous materials site.

Scope: the HASP portion of the work plan shall comply with 29 CFR § 1910.120 and OAR Chapter 437, Division 2.

Procedures: the HASP shall include a description of RI/FS activity-related risks, protective clothing and equipment, training, monitoring procedures, decontamination procedures and emergency response actions.

F. Maps

The work plan shall include Facility maps which clearly show Facility topography, on-site structures, waste disposal areas and proposed sampling locations.

V. EVALUATION AND IMPLEMENTATION OF SOURCE CONTROL MEASURES

Objective: To implement source control measures necessary to address unpermitted discharges or migrations of hazardous substances to the lower Willamette River or to its sediments that warrant a removal action under OAR 340-122-070.

Scope: The Source Control Measures Work Plan shall provide for gathering sufficient information to evaluate, design and implement necessary source control measures.

Procedures: the Source Control Measures Work Plan shall be designed and conducted to characterize all release mechanisms to the Willamette River. Characterization data shall be adequate to evaluate, design and implement necessary source control measures. Source control measures shall address contaminant migration to the river through overland transport, storm water runoff, free phase product migration, direct release, and/or dissolved groundwater contaminant migration that warrant removal action under OAR 340-122-070.

VI. RISK ASSESSMENT WORK PLAN

A. Upland Human Health Risk Assessment Work Plan

Objective: to evaluate the demographic, geographic, physical, chemical, and biological factors at the Facility to characterize current or reasonably likely future risks to human health from threatened or actual release(s) of a hazardous substance at or from the Facility; document the magnitude of the potential risk at the Facility; support risk management decisions; and establish remedial action goals if necessary.

Scope: the human health RA shall evaluate risk in the context of current and reasonably likely future land and water uses and in the absence of any actions to control or mitigate these risks (i.e., under an assumption of no action). The human health RA portion of the work plan shall be developed based on the requirements specified in OAR § 340-122-084, DEQ guidance, and the Risk Assessment Guidance for Superfund – Human Health Evaluation Manual Part A, United States Environmental Protection Agency (EPA) Interim Final, July 1989 (RAGS-HHEM). A suggested outline for the human health evaluation is given in Exhibit 9-1 of the RAGS-HHEM. The work plan should use this outline as a framework for discussing the methodologies and assumptions to be used in assessing the potential human health risks at the Facility.

Procedure: the plan shall describe the different tasks involved in preparing the human health RA. The human health RA can be completed using either deterministic or probabilistic methodologies. If probabilistic methodologies are to be used, then the Port shall discuss risk protocol with DEQ before commencing a probabilistic RA.

The upland human health RA shall be designed to achieve the following goals:

1. Develop appropriate exposure units considering the nature, extent, and distribution of contamination and the reasonably likely future land and water use in the Facility locality;

2. Establish data quality objectives for each identified exposure unit;
3. Collect data appropriate to satisfy the data quality objectives for each exposure unit;
4. Identify contaminants of interest for each media of concern;
5. Develop exposure scenarios based on current and reasonably likely land use, Facility features and potentially exposed populations;
6. Identify appropriate exposure factors for all exposure pathways to be evaluated;
7. Identify the appropriate toxicity factors for all exposure pathways to be evaluated; and
8. Quantify the risks to human health at the Facility.

B. Upland Ecological Risk Assessment Work Plan

Objective: to evaluate the demographic, geographic, physical, chemical, and biological factors at the Facility for the purposes of characterizing current or reasonably likely future risks to the environment as a result of a threatened or actual release(s) of a hazardous substance at or from the Facility, quantifying the potential risk at a Facility, supporting risk management decisions, and establishing remedial action goals if necessary.

Scope: the ecological RA shall evaluate risk in the context of current and reasonably likely future land and water uses and in the absence of any actions to control or mitigate these risks (i.e., under an assumption of no action). The ecological RA will use a tiered approach (with four levels) to produce a focused and cost-effective assessment of risk. The ecological RA work plan shall be developed based on the requirements specified in rule under OAR § 340-122-084 and DEQ guidance.

Procedure: the plan shall describe the different tasks involved in preparing the ecological RA. Ecological RAs may include a level I scoping plan; a level II screening plan; a level III baseline plan; and a level IV field baseline plan. The level III and level IV baseline plans shall include an exposure analysis, an ecological response analysis, a risk characterization and an uncertainty analysis as required by OAR § 340-122-084(3). The ecological RA can be completed using either deterministic or probabilistic methodologies. If probabilistic methodologies are to be used, then the Port shall discuss risk protocol with DEQ before commencing a probabilistic RA.

Terrestrial habitats and receptors shall be evaluated through the following approach:

1. Complete a Level I Scoping assessment according to DEQ guidance for the terrestrial portion of the Facility;
2. Make a preliminary determination of Facility locality with respect to terrestrial receptors and current and potential future exposure to Facility-related contaminants; and

3. Determine the potential for the presence and absence of terrestrial threatened or endangered species.

VII. REPORTS

A. Quarterly Progress Reports

The Port shall deliver to DEQ on or before the fifteenth day of the month following each calendar quarter of this Agreement a progress report containing the following items. DEQ anticipates that progress reports will not exceed two pages in length. A report may be provided by email, except as noted.

1. Actions taken under this Agreement during the previous quarter;
2. Sampling, test results, and any other data generated by the Port during the previous quarter (hard copies of analytical data should be provided by mail);
3. A description of any problems experienced during the previous quarter and the actions taken to resolve them; and
4. Actions scheduled to be taken in the next quarter.

B. Remedial Investigation Report

The Remedial Investigation Report shall follow the outline in Table 3-13 (page 3-30 - 3-31) in the CERCLA RI/FS guidance, as applicable, and address the items listed below:

1. Executive Summary
2. Introduction
3. Facility Background

A discussion and supporting maps, if applicable, of the Facility setting, the Facility itself, Facility operations, and current and reasonably likely future land and water uses.

4. Study Area Investigation

A discussion of the investigative procedures and results for soil, groundwater, surface water, sediments and air.

5. Summary and Conclusions

A discussion of the nature, extent, distribution and environmental fate and transport of contaminants in soil, groundwater, surface water, sediments and air.

6. Appendices

Detailed information supporting the results of the RI shall be submitted in the Appendices of the report.

C. Risk Assessment Report

1. Human Health Risk Assessment Report

The results of the human health RA should follow DEQ RA guidance for human health and RAGS-HHEM Part A.

2. Ecological Risk Assessment Report

The main sections of the ecological RA report should follow specific DEQ guidance for report formats at each level (I-III).

D. Feasibility Study Report

The results of the FS will comply with OAR Chapter 340, Division 122, DEQ Guidance, and, as appropriate, Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, OSWER Directive 9355.3-01, 1988. The results of the FS will follow the outline suggested in Table 6-5 (Pages 6-15) of the CERCLA RI/FS guidance.

The main sections of the FS report will include the following items:

1. Introduction

2. Identification of Hot Spots of Contamination

3. Identification of Areas or Volumes of Media which Require Remedial Action

Identify areas or volumes of media which exceed the acceptable risk level, and areas or volumes of media which have been identified as contaminant hot spots.

4. Development of Remedial Action Objectives

Develop and discuss the remedial action objectives (RAOs) that meet the standards in OAR § 340-122-040.

5. Identification and Screening of Remedial Technologies

Identify potential containment, treatment, and removal technologies and eliminate (screen) those technologies that cannot be implemented at the Facility.

6. Development and Screening of Preliminary Remedial Action Alternatives

Develop a range of preliminary remedial action alternatives which achieve the remedial action objectives and are protective of public health, safety and welfare, and the environment. Retain the "No Action" alternative for comparison.

7. Detailed Analysis of Remedial Action Alternatives:

Analyze remedial action alternatives in detail in accordance with OAR §§ 340-122-085 and 340-122-090.

8. Comparative Analysis of Remedial Action Alternatives

Compare and rank the remedial action alternatives based on the detailed analysis of remedial action alternatives.

9. Recommended Remedial Action Alternative

Recommend a remedial action alternative based on the comparative analysis of remedial action alternatives. Perform a residual RA the recommended alternative in accordance with OAR § 340-122-084(4). Include the information required by OAR § 340-122-085(8).

E. Source Control Measures Evaluation

This report shall describe the information gathered during the implementation of the Source Control Measures Work Plan. It shall identify the SCMs that are necessary to address unpermitted discharges or migrations of hazardous substances to the lower Willamette River or to its sediments that warrant a removal action under OAR § 340-122-070.

F. Source Control Measures Implementation Report

This report shall describe the Port's implementation of the SCMs selected by DEQ.

VII. REPORT DISTRIBUTION

- A. Two (2) bound and one (1) unbound copy(s) of all reports, other than the Quarterly Progress Reports, will be submitted to DEQ.
- B. DEQ requests that all report copies be duplex printed on recycled paper.

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